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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/072,571

DATE: 02/28/2002 TIME: 12:43:39

Input Set : A:\C-2789_6-US sequence listing.txt

Output Set: N:\CRF3\02282002\J072571.raw

SEQUENCE LISTING

(1) GENERAL INFORMATION:

```
6
             (i) APPLICANT: Abrams, Mark A.
                             Bauer, S. C.
      7
      8
                             Braford-Goldberg, Sarah R.
      9
                             Caparon, Maire H.
     10
                             Easton, Alan M.
     11
                             Klein, Barbara K.
     12
                             McKearn, John P.
     13
                             Olins, Peter O.
     14
                             Paik, Kumnan
     15
                             Thomas, John W.
            (ii) TITLE OF INVENTION: Co-administration of Interleukin-3
     17
                                      Mutant Polypeptides with CSF's for Multi-lineage
     18
     19
                                      Hematopoietic Cell Production
     21
           (iii) NUMBER OF SEQUENCES: 58
     23
            (iv) CORRESPONDENCE ADDRESS:
     24
                   (A) ADDRESSEE: S. Christopher Bauer, Pharmacia Corp.
     25
                                  Corporate Patent Dept.
     26
                   (B) STREET: 800 N. Lindbergh
     27
                   (C) CITY: St. Louis
     28
                   (D) STATE: Missouri
                   (E) COUNTRY: USA
     29
     30
                   (F) ZIP: 63167
     32
             (V) COMPUTER READABLE FORM:
     33
                   (A) MEDIUM TYPE: Floppy disk
     34
                   (B) COMPUTER: IBM PC compatible
                   (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     35
                   (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
     36
     38
            (vi) CURRENT APPLICATION DATA:
C--> 39
                   (A) APPLICATION NUMBER: US/10/072,571
                   (B) FILING DATE: 08-Feb-2002
C-->40
     41
                   (C) CLASSIFICATION:
           (vii) PRIOR APPLICATION DATA:
     51
                   (A) APPLICATION NUMBER: US 08/446,871
     44
                   (B) FILING DATE: 06-JUN-1995
     45
                   (A) APPLICATION NUMBER: PCT/US95/01184
     48
                   (B) FILING DATE: 02-FEB-1995
     49
                   (A) APPLICATION NUMBER: US 08/193,373
     52
     53
                   (B) FILING DATE: 04-FEB-1994
     55
          (viii) ATTORNEY/AGENT INFORMATION:
     56
                   (A) NAME: Bauer, S. Christopher Bauer
     57
                   (B) REGISTRATION NUMBER: 42,305
```

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                                                          TIME: 12:43:39
                 Input Set : A:\C-2789_6-US sequence listing.txt
                 Output Set: N:\CRF3\02282002\J072571.raw
58
              (C) REFERENCE/DOCKET NUMBER: C-2789/6
60
       (ix) TELECOMMUNICATION INFORMATION:
61
              (A) TELEPHONE: (636)737-6257
              (B) TELEFAX: (636)737-5452
62
65 (2) INFORMATION FOR SEQ ID NO: 1:
        (i) SEQUENCE CHARACTERISTICS:
67
68
              (A) LENGTH: 133 amino acids
69
              (B) TYPE: amino acid
70
              (D) TOPOLOGY: linear
72
       (ii) MOLECULE TYPE: peptide
75
       (ix) FEATURE:
76
              (A) NAME/KEY: Modified-site
77
              (B) LOCATION: 1
78
              (D) OTHER INFORMATION: /note= "Met- may or may not precede the
79 amino acid in position 1"
81
       (ix) FEATURE:
82
              (A) NAME/KEY: Modified-site
              (B) LOCATION: 17
83
              (D) OTHER INFORMATION: /note= "Xaa at position 17 is Ser,
84
85 Lys, Gly, Asp, Met, Gln, or Arg"
       (ix) FEATURE:
87
88
              (A) NAME/KEY: Modified-site
89
             (B) LOCATION: 18
             (D) OTHER INFORMATION: /note= "Xaa at position 18 is Asn,
91 His, Leu, Ile, Phe, Arg, or Gln"
93
       (ix) FEATURE:
94
             (A) NAME/KEY: Modified-site
95
             (B) LOCATION: 19
96
             (D) OTHER INFORMATION: /note= "Xaa at position 19 is Met,
97 Phe, Ile, Arg, Gly, Ala, or Cys"
99
       (ix) FEATURE:
100
              (A) NAME/KEY: Modified-site
101
              (B) LOCATION: 20
102
              (D) OTHER INFORMATION: /note= "Xaa at position 20 is Ile,
103 Cys, Gln, Glu, Arg, Pro, or Ala"
105
        (ix) FEATURE:
106
              (A) NAME/KEY: Modified-site
107
              (B) LOCATION: 21
              (D) OTHER INFORMATION: /note= "Xaa at position 21 is Asp,
109 Phe, Lys, Arg, Ala, Gly, Glu, Gln, Asn, Thr, Ser,
110 or Val"
112
        (ix) FEATURE:
113
              (A) NAME/KEY: Modified-site
114
              (B) LOCATION: 22
115
              (D) OTHER INFORMATION: /note= "Xaa at position 22 is Glu,
116 Trp, Pro, Ser, Ala, His, Asp, Asn, Gln, Leu, Val,
117 or Gly"
        (ix) FEATURE:
119
120
              (A) NAME/KEY: Modified-site
```

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                Input Set : A:\C-2789_6-US sequence listing.txt
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121
              (B) LOCATION: 23
122
              (D) OTHER INFORMATION: /note= "Xaa at position 23 is Ile,
123 Val, Ala, Leu, Gly, Trp, Lys, Phe, Ser, or
124 Arg"
        (ix) FEATURE:
126
127
              (A) NAME/KEY: Modified-site
128
              (B) LOCATION: 24
              (D) OTHER INFORMATION: /note= "Xaa at position 24 is Ile,
129
130 Gly, Val, Arg, Ser, Phe, or Leu"
        (ix) FEATURE:
132
133
              (A) NAME/KEY: Modified-site
              (B) LOCATION: 25
134
              (D) OTHER INFORMATION: /note= "Xaa at position 25 is Thr,
135
136 His, Gly, Gln, Arg, Pro, or Ala"
138
        (ix) FEATURE:
139
              (A) NAME/KEY: Modified-site
140
              (B) LOCATION: 26
141
              (D) OTHER INFORMATION: /note= "Xaa at position 26 is His,
142 Thr, Phe, Gly, Arg, Ala, or Trp"
        (ix) FEATURE:
144
              (A) NAME/KEY: Modified-site
145
146
              (B) LOCATION: 27
147
              (D) OTHER INFORMATION: /note= "Xaa at position 27 is Leu,
148 Gly, Arg, Thr, Ser, or Ala"
        (ix) FEATURE:
151
              (A) NAME/KEY: Modified-site
152
              (B) LOCATION: 28
              (D) OTHER INFORMATION: /note= "Xaa at position 28 is Lys,
153
154 Arg, Leu, Gln, Gly, Pro, Val, or Trp"
156
        (ix) FEATURE:
              (A) NAME/KEY: Modified-site
157
158
              (B) LOCATION: 29
              (D) OTHER INFORMATION: /note= "Xaa at position 29 is Gln,
159
160 Asn, Leu, Pro, Arg, or Val"
162
        (ix) FEATURE:
163
              (A) NAME/KEY: Modified-site
              (B) LOCATION: 30
164
165
              (D) OTHER INFORMATION: /note= "Xaa at position 30 is Pro,
166 His, Thr, Gly, Asp, Gln, Ser, Leu, or Lys"
168
        (ix) FEATURE:
169
              (A) NAME/KEY: Modified-site
170
              (B) LOCATION: 31
171
              (D) OTHER INFORMATION: /note= "Xaa at position 31 is Pro,
172 Asp, Gly, Ala, Arg, Leu, or Gln"
174
        (ix) FEATURE:
175
              (A) NAME/KEY: Modified-site
176
              (B) LOCATION: 32
177
              (D) OTHER INFORMATION: /note= "Xaa at position 32 is Leu,
178 Val, Arg, Gln, Asn, Gly, Ala, or Glu"
```

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                Input Set : A:\C-2789_6-US sequence listing.txt
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        (ix) FEATURE:
180
              (A) NAME/KEY: Modified-site
181
182
              (B) LOCATION: 33
              (D) OTHER INFORMATION: /note= "Xaa at position 33 is Pro,
183
184 Leu, Gln, Ala, Thr, or Glu"
    (ix) FEATURE:
186
              (A) NAME/KEY: Modified-site
187
              (B) LOCATION: 34
188
              (D) OTHER INFORMATION: /note= "Xaa at position 34 is Leu,
190 Val, Gly, Ser, Lys, Glu, Gln, Thr, Arg, Ala, Phe,
191 Ile, or Met"
       (ix) FEATURE:
193
              (A) NAME/KEY: Modified-site
194
195
              (B) LOCATION: 35
              (D) OTHER INFORMATION: /note= "Xaa at position 35 is Leu,
196
197 Ala, Gly, Asn, Pro, Gln, or Val"
      (ix) FEATURE:
              (A) NAME/KEY: Modified-site
200
201
              (B) LOCATION: 36
202
              (D) OTHER INFORMATION: /note= "Xaa at position 36 is Asp,
203 Leu, or Val"
205
       (ix) FEATURE:
              (A) NAME/KEY: Modified-site
206
207
              (B) LOCATION: 37
              (D) OTHER INFORMATION: /note= "Xaa at position 37 is Phe,
208
209 Ser, Pro, Trp, or Ile"
211
       (ix) FEATURE:
212
              (A) NAME/KEY: Modified-site
213
              (B) LOCATION: 38
214
              (D) OTHER INFORMATION: /note= "Xaa at position 38 is Asn,
215 or Ala"
       (ix) FEATURE:
217
              (A) NAME/KEY: Modified-site
218
219
              (B) LOCATION: 40
220
              (D) OTHER INFORMATION: /note= "Xaa at position 40 is Leu,
221 Trp, or Arg"
223
      (ix) FEATURE:
224
              (A) NAME/KEY: Modified-site
              (B) LOCATION: 41
225
              (D) OTHER INFORMATION: /note= "Xaa at position 41 is Asn,
226
227 Cys, Arg, Leu, His, Met, or Pro"
    (ix) FEATURE:
229
230
              (A) NAME/KEY: Modified-site
231
              (B) LOCATION: 42
232
              (D) OTHER INFORMATION: /note= "Xaa at position 42 is Gly,
233 Asp, Ser, Cys, Asn, Lys, Thr, Leu, Val, Glu, Phe, Tyr,
234 Ile, Met, or Ala"
236
       (ix) FEATURE:
237
             (A) NAME/KEY: Modified-site
```

RAW SEQUENCE LISTING

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RAW SEQUENCE LISTING
                PATENT APPLICATION: US/10/072,571
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                Input Set : A:\C-2789_6-US sequence listing.txt
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238
              (B) LOCATION: 43
              (D) OTHER INFORMATION: /note= "Xaa at position 43 is Glu,
239
240 Asn, Tyr, Leu, Phe, Asp, Ala, Cys, Gln, Arg, Thr, Gly,
241 or Ser"
        (ix) FEATURE:
243
              (A) NAME/KEY: Modified-site
244
245
              (B) LOCATION: 44
              (D) OTHER INFORMATION: /note= "Xaa at position 44 is Asp,
246
247 Ser, Leu, Arg, Lys, Thr, Met, Trp, Glu, Asn, Gln, Ala,
248 or Pro"
        (ix) FEATURE:
250
251
              (A) NAME/KEY: Modified-site
252
              (B) LOCATION: 45
253
              (D) OTHER INFORMATION: /note= "Xaa at position 45 is Gln,
254 Pro, Phe, Val, Met, Leu, Thr, Lys, Trp, Asp, Asn, Arg,
255 Ser, Ala, Ile, Glu, or His"
257
        (ix) FEATURE:
              (A) NAME/KEY: Modified-site
258
259
              (B) LOCATION: 46
              (D) OTHER INFORMATION: /note= "Xaa at position 46 is Asp,
260
261 Phe, Ser, Thr, Cys, Glu, Asn, Gln, Lys, His, Ala, Tyr,
262 Ile, Val, or Gly"
264
        (ix) FEATURE:
265
              (A) NAME/KEY: Modified-site
266
              (B) LOCATION: 47
              (D) OTHER INFORMATION: /note= "Xaa at position 47 is Ile,
267
268 Gly, Val, Ser, Arg, Pro, or His"
270 ·
       (ix) FEATURE:
              (A) NAME/KEY: Modified-site
271
              (B) LOCATION: 48
272
              (D) OTHER INFORMATION: /note= "Xaa at position 48 is Leu,
273
274 Ser, Cys, Arg, Ile, His, Phe, Glu, Lys, Thr, Ala, Met,
275 Val, or Asn"
277
       (ix) FEATURE:
              (A) NAME/KEY: Modified-site
278
279
              (B) LOCATION: 49
              (D) OTHER INFORMATION: /note= "Xaa at position 49 is Met,
280
281 Arg, Ala, Gly, Pro, Asn, His, or Asp"
283
        (ix) FEATURE:
284
              (A) NAME/KEY: Modified-site
285
              (B) LOCATION: 50
              (D) OTHER INFORMATION: /note= "Xaa at position 50 is Glu,
286
287 Leu, Thr, Asp, Tyr, Lys, Asn, Ser, Ala, Ile, Val, His,
288 Phe, Met, or Gln"
290
        (ix) FEATURE:
291
              (A) NAME/KEY: Modified-site
292
              (B) LOCATION: 51
293
              (D) OTHER INFORMATION: /note= "Xaa at position 51 is Asn,
294 Arg, Met, Pro, Ser, Thr, or His"
```

VERIFICATION SUMMARYDATE: 02/28/2002PATENT APPLICATION: US/10/072,571DATE: 12:43:40

Input Set: A:\C-2789_6-US sequence listing.txt
Output Set: N:\CRF3\02282002\J072571.raw

```
L:39 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:40 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:744 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:750 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:753 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:756 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:759 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:896 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:927 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:1147 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:1217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1565 \text{ M}:341 \text{ W}: (46) \text{ "n" or "Xaa" used, for SEQ ID}\#:3
L:1568 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1571 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:2252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2255 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2267 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2311 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2652 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2717 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:2720 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 L:2723 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:2726 \text{ M}:341 \text{ W}: (46) \text{ "n" or "Xaa" used, for SEQ ID}\#:5
L:2729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:2732 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:2735 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:3047 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L\!:\!3050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3053 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3056 \ M:341 \ W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3059 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
```

VERIFICATION SUMMARYPATENT APPLICATION: **US/10/072,571**DATE: 02/28/2002
TIME: 12:43:40

Input Set : A:\C-2789_6-US sequence listing.txt
Output Set: N:\CRF3\02282002\J072571.raw

```
L:3065 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3094 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:3141 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]
L:3357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3422 M:220 C: Keyword misspelled or invalid format, [(A) NAME/KEY:]
L:3500 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]
L:3576 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]
L:3671 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
```